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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,928	04/01/2004	Kerry D. Hinson	60680-1780	2927

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RADER, FISHMAN & GRAUER PLLC
39533 WOODWARD AVENUE
SUITE 140
BLOOMFIELD HILLS, MI 48304-0610

EXAMINER

SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/708,928	Applicant(s) HINSON ET AL.	
	Examiner Jeffrey Sharp	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-21 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

[1] This action is responsive to Applicant's remarks/amendment/request for continued examination filed on 21 November 2005 with regard to the Official Advisory action mailed on 19 October 2005.

Status of Claims

[2] Claims 1 and 3-21 are pending. Claim 2 is cancelled.

Election/Restrictions

[3] Newly submitted claims 13-18 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 13-18 are directed to a method, and not the previously presented product.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13-18 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

[4] The drawings are objected to because:

Figures 3 and 4 are currently objected to as data lines for "Initial", "Day 3", "Day 7", "Day 10", "Day 14", "Day 17", and "Day 21" are illegible. It appears the graph may have been photocopied from a direct printout of an oscilloscope capture. It is suggested that Applicant

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submit new graphs that possess legible data points. It would be beneficial to decrease the Y-axis scale so that slight differences may be seen.

The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures.

Response to Arguments/Remarks

[5] Claim(s) 1 and 3-8 were previously rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. as being obvious over Baumann US-4,864,103.

Applicant's arguments/remarks with regard to this reference have been fully considered, but are moot in view of the following new grounds of rejection outlined below.

New Grounds of Rejection

Claim Rejections - 35 USC § 102

[6] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[7] Claims 1, 3, 4, 6- 9, 11, 12, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 11050842.

In short, JP 11050842 teaches a fastener assembly for connecting two components (1,2) of an engine, said assembly comprising:

a threaded fastener(s) (4) having a head portion with radially projecting collar (unlabeled),

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a retention sleeve (3) disposed about said fastener having an outwardly projecting head flange (3b), and having a necking portion extending away from the flange portion which is of smaller diameter than said projecting head flange; said retention sleeve extending at least partially into an aperture formed in a first engine component (1,3a,5), and

a wave spring(s) (6) disposed about the retention sleeve which has an inner diameter slightly larger than an outer diameter of the retention sleeve, said wave spring abutting the retention sleeve such that it is "selectively" prevented from being fully compressed (shown clearly in drawing).

*Pertinent to claims 11 and 12, Figure 2 of JP 11050842 shows multiple fasteners and wave springs to acoustically decouple two engine components.

Claim Rejections - 35 USC § 103

[8] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[9] Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11050842.

In short, JP 11050842 teaches each and every limitation found in claim

However, JP 11050842 appears to be silent as what material the assembly parts are manufactured from (herein, "metallic material").

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art to make the fastener assembly components taught by JP 11050842 from a metallic material, as it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

In re Leshin, 125 USPQ 416. It is also common knowledge to choose a material that has sufficient strength, durability, flexibility, hardness, etc. for the application and intended use of that material. In the instant case, it would be readily appreciated by those of ordinary skill in the art, to make engine components from a metallic material for obvious reasons.

[10] Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11050842 in view of Fonville US-6,591,801.

In short, JP 11050842 teaches each and every limitation found in claim 7, including the acoustic decouplement of at least two engine components (1,2);

However, the JP 11050842 fails to disclose expressly, at least one of the engine components to be a valve cover.

Fonville suggests acoustically decoupling a valve cover from an engine block.

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art, to employ the fastening assembly taught by JP 11050842 in between a valve cover and engine block as suggested by Fonville, in order to "guarantee better service life", reduce isolator wear, suspend the valve cover in a "freely vibrating manner", and/or prevent the transmission of "solid-bourne sound" from the internal combustion engine to the valve cover.

[11] Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11050842 in view of Spies et al. US-5,624,099.

In short, JP 11050842 teaches each and every limitation found in claim 1;

However, the JP 11050842 reference fails to disclose expressly, the retention sleeve (3) having an inner diameter smaller than that of the fastener shaft.

Spies et al. suggest making a retention sleeve (4) with an inner diameter (17) smaller than that of a fastener shaft (18), in order to keep the two parts from separation. One of ordinary skill in the art would further appreciate that this fastener "sub-assembly" may also help reduce manufacturing costs, prevent inadvertent loss of either part, and/or act as a safeguard from accidentally "dropping" one of the two parts inside the engine head area upon assembly. By making the two parts integral, the operator is guaranteed that a washer is present; thereby reducing the number of engine re-works.

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art, to modify the respective diameters of the fastener shaft and retention sleeve taught by JP 11050842 such that the retention sleeve has an inner diameter smaller than that of the fastener shaft as suggested by Spies et al., in order to achieve any or all of the abovementioned advantages.

Note that it has been held to be within the general skill of a worker in the art to make plural parts unitary as a matter of obvious engineering choice. *In re Larson*, 144 USPQ 347 (CCPA 1965); *In re Lockart*, 90 USPQ 214 (CCPA 1951).

See also, US-4,732,519 to Wagner, which also makes obvious, a retention sleeve (14) having an internal diameter (33) less than a shaft portion (28) of a threaded fastener (12) so as to keep the retention sleeve (14) and fastener (12) held together.

Conclusion

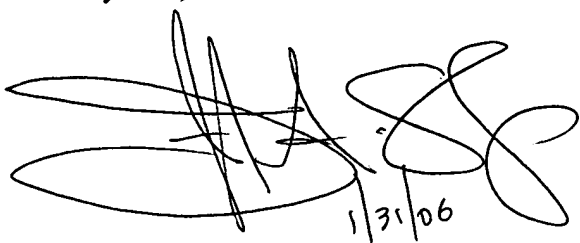
[12] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

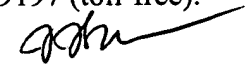
See PTO-892

[13] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).




JJ Swann
Supervisory Patent Examiner
Technology Center 3600